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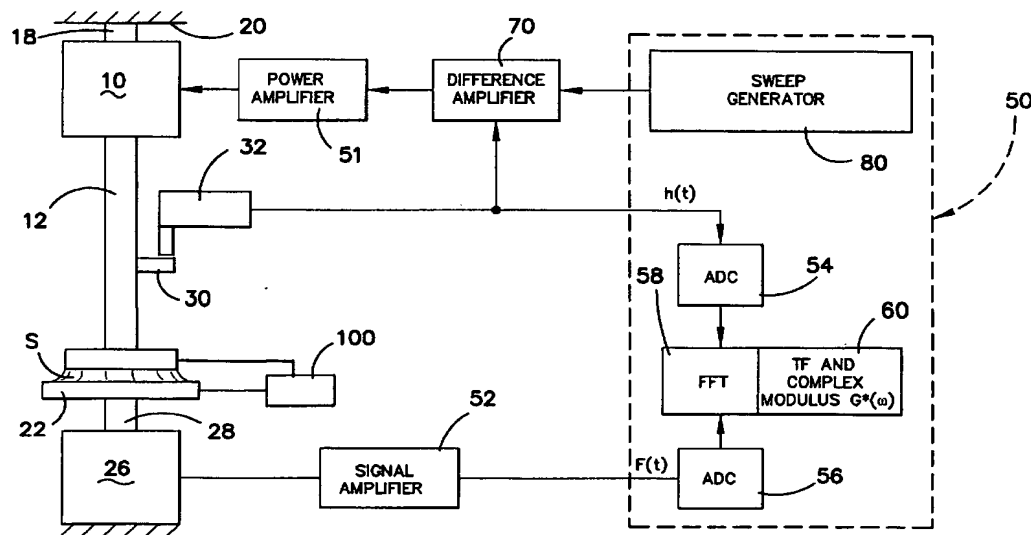
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(54) Title: RHEOMETER



(57). Abstract- A rheometer and method of making rheological measurements is disclosed, in which a sample S is supported between plates (14) and (22) and an alternating movement is applied by a driver (10), support rod (12) and plate (14). Force and displacement measurements are taken and the property determined from those measurements. The vibrating signal which is applied is in the form of a frequency sweep signal having a monotonic group delay function. The top plate (14) is provided with a surface which causes a meniscus to form up a side edge of the plate to reduce the spring nature of the sample when the movement is supplied to the sample, and a supporting rod (12) which supports the top plate (14) is preferably formed from a material having a low coefficient of thermal expansion so that the gap between the plates (14) and (22) is maintained substantially constant if the sample is heated to take measurements at different temperatures.

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